Grade: 6th – Adult **Time:** 1 hour

Season: Spring, summer, fall

Is There A Fungus Among Us?

National Science Teaching Standards

A. Science as INQUIRY

C. LIFE Science

G. HISTORY and NATURE of Science

Background Information:

The term fungus (fungi is plural) is commonly used for groups of plants that, lacking chlorophyll, must live on organic matter for a food source. Some fungi break down or decompose various kinds of dead plants and animals and are termed **saprophytes.** Others attack living organisms and are called **parasites.** In most fungi, the vegetative body consist of fine threads, or hyphae, this in a mass form the mycelium. The mycelium of mushrooms grows underground. In parasitic fungi, it invades the host. The fruiting body of the fleshy fungi, "the mushroom" is the part that is seen; some can be eaten by people.

The mushrooms and most types of fungi are usually found from April to November. They may be found in every type of environment such as woodland, prairies, and even in your lawns. Generally, they will prefer moist, warm areas for best growth. Fungi are one of the little known members of the natural community. Because they come in such a wide variety of shapes, sizes, and colors, the can provide for fascinating study.

Objective:

- Students will try to find and collect representatives from as many different groups of fungi as they can.
- Students will try to determine if the fungus is saprophytic or parasitic.

Pre Activity:

- Discuss what fungi are. Read background information to students.
- Using school resources and internet try to find fungi common to Iowa.

Equipment:

- For each group: clipboard, mushroom ID guide, 1 collection bag
- Is there a Fungus Among Us worksheet
- Pencil

Procedure:

- 1. Discuss with the students: basic types of fungi, general habitats in which they are found, and their role in the environment.
- 2. Divide the students into groups of 3-4.
- 3. Hand out the group equipment listed above.

- 4. Challenge the students to go into the field to look for the various kinds of fungi that are listed on the worksheet. (hand it out)
- 5. Have students try to determine whether the fungi are parasitic or saprophytic.
- 6. Remind them many fungi are poisonous and not to eat any of them or put their hands in their mouths.
- 7. Discuss boundaries of exploration (with in your sight)
- 8. Send them out to find fungus among us!
- 9. After about 20-30 minutes bring students back to starting point.
- 10. Have students share the fungi they discovered.
- 11. Wash hands with soap and water.

Post Activity:

- Research fungi, finding which are edible and which are poisonous.
- Go on a fungi walk around the school grounds or neighborhood...finding the fungus among your community. Collect specimens and try to identify back in your classroom.
- Make slides of your specimens and look at them under the microscope.
- Research the importance of fungi.
- Make a "spore" print. You need a mushroom that has gills. Pick it very carefully. Place it carefully on a piece of white paper. Let it set for a day. Pick up the mushroom and see the print. It is made from the spores of the mushroom. Find out what spores are and other mushrooms with gills.

Post Discussion:

- Discuss the importance of exact identification of fungi.
- Are fungi valuable members of an environment? Explain.
- Do fungi help people? How?
- Discuss which mushrooms you have eaten...likes and dislikes.
- Discuss decomposers. Which fungi did you find that would be considered decomposers? How do they help our environment?